

ATTACHMENT - CLAIMS LISTING

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A steel tower for a windmill, comprising:
a number of cylindrical or tapered tower sections which are configured to support the windmill,
at least some of the wider tower sections of which being subdivided into two or more associated elongated shell segments, which associated shell segments are adapted to combine into a complete tower section, by means of
inwardly-extending vertical flanges provided on each of the associated shell segment which vertical flanges are tightened connected together to form an associated complete tower section, e.g. by bolts, and
inwardly-extending upper and lower horizontal flanges provided, respectively, on said associated shell segments being also provided with upper and lower horizontal flanges, respectively, to allow for interconnection of the tower sections one on top of the other to support the windmill.
2. (currently amended) A windmill steel tower according to claim 1, wherein at least one of the tower sections is being divided into three associated shell segments of essentially equal arc length, i.e. 120° each.
3. (currently amended) A windmill steel tower according to claim 1, wherein at least one of a the shell segments comprises at least two lengths of rolled steel plate segments welded joined together along their abutting horizontal edges by welds such that the vertical flanges of the associated shell segment run along side edges of each length of the rolled steel plate and being fitted with the horizontal flanges of the associated shell segment run along the free edges on uppermost and lowermost lengths of rolled steel plates edges, said vertical and horizontal flanges being provided with a number of throughholes for interconnecting bolts.

4. (currently amended) A windmill steel tower according to claim 1, wherein the vertical flanges are welded onto the shell segments offset from the corresponding side edges of the respective shell segments by a distance leaving such that a space is provided between opposing surfaces of adjacent vertical flanges, wherein for a spacer bar is sandwiched between the adjacent vertical flanges them, and wherein as the adjacent vertical flanges with the spacer bar therebetween are bolted together.
5. (currently amended) A windmill steel tower according to claim 1-4, wherein said spacer bar is provided with throughholes matching the holes in the flanges, and preferably each throughhole in the spacer bar has a notch extending from the edge of the bar into the throughhole and wide enough to allow lateral sliding of the spacer bar over a bolt.
6. (currently amended) A windmill steel tower according to claim 1-5, wherein the vertical and/or horizontal joints between shell segments and tower sections, respectively, are being covered by inserting a filler material and/or a filler element.
7. (currently amended) A windmill steel tower according to claim 1, wherein at least one shell segment is provided with fitting out in the form of e.g. includes a ladder section and cable fixtures before being transported to the building site.
8. (currently amended) A method of building a large size, cylindrical or tapered tower for a windmill, of single-walled steel tower sections from prefabricated shell segments, whereby at least the wider sections are divided into segments along vertical lines and interconnected by flanges provided along the edges thereof, comprising the steps of:
a) providing fabricating two or more tower shell segments from a rolled steel plate having the required a desired radius of curvature, such that said shell segments forming in unison a complete circumferential tower section, said fabricating step including b)
providing each shell segment with vertical and horizontal connecting flanges along free edges thereof extending inwardly relative to the radius of curvature,

- e) mounting one or more of the shell segments on a transportation carriage or supporting frame,
- d) transporting the one or more shell said supported segments mounted on the transportation carriage or supporting frame to the-a building site,
- e) connecting mounting the shell segments together at the building site with connecting devices along their vertical flanges to provide one or more tower sections by connecting means, e.g. bolts,
- f) mounting tower sections on top of each other at the building site by connecting them along their opposing horizontal flanges by-with connecting devices,means, e.g. bolts and
supporting a windmill with the tower sections.

9. (currently amended) A method according to claim 8, wherein said fabricating rolled steel plate in step a) constitutes includes the steps of forming a rolled steel plate in the form of a 360° shell, which is initially being welded welding the 360° shell together to form a cylindrical or tapered tower section, and dividing the tower section then it is cut into the a number of elongated shell segments required.

10. (currently amended) A method according to claim 8;
wherein said fabricating previous to step a), an optional number of rolled steel plates in the form of elongated includes the steps of fabricating groups of two or more different length shell segments,
wherein the connecting step includes the steps of:
connecting two or more shell segments of one group together along their abutting horizontal edges to form a first complete tower section with a first circumferential length, and
connecting two or more shell segments from two different groups are being welded together along their abutting horizontal edges to establish a second complete tower section with a second circumferential larger-lengths of tower shell.

11. (currently amended) A method according to claim 1-8, wherein said connecting the flanges in step b) are being welded includes the step of welding the vertical and horizontal flanges of adjacent shell segments together in a position pointing towards the center of the tower.

12. (currently amended) A method according to claim 8,

wherein said providing each shell segment with vertical and horizontal flanges along free edges step includes the step of welding the vertical flanges onto the shell segments are being welded in such distance offset from the side edges of the respective shell segments such that a space is provided between opposing surfaces of adjacent vertical flanges, and

wherein said connecting step includes the step of positioning a spacer bar could be sandwiched between at least some of the opposing surfaces of adjacent vertical flanges so that the spacer bar remains positioned between the opposing surfaces of the adjacent vertical flanges as they the adjacent vertical flanges are tightened connected together.

13. (currently amended) A method according to claim 12,

wherein a vertical joint is visible after said interconnecting step two neighbour shells via of the opposing surfaces of the adjacent vertical flanges with the an intermediary spacer bar therebetween, and

further including the step of is being covered by inserting a filler material and/or a filler element between the adjacent vertical flanges to cover the vertical joint.

14. (currently amended) A method according to claim 8, wherein said mounting tower section step includes the step of interconnecting interconnection of horizontal flanges of adjacent tower sections is performed after offsetting the vertical division lines of the shell segments of neighbor the adjacent tower sections.

15. (currently amended) A method according to claim 8, wherein further comprising the step of fitting out equipping at least one each shell segment with necessary a ladders section or a cable fixture etc. is performed before said transporting step transportation to the site.
16. (currently amended) A method according to claim 8, further including the step of wherein all parts of the tower structure are being surface treating treated the shell segments in the a workshop before said transporting stepbeing transported to the building site.
17. (cancelled)